## **EAST Search History**

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L22	192872	(contact near3 metal)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:54
L23	1015	L22 and ("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOOR	OR	ON	2010/03/16 11:54
L24	18	L23 and ("current spreading" "current diffusing" (diffuse near2 current)) near5 nm	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:54
L25	9	24 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:54
L26	227	("current spreading" "current diffusing") near5 (thickness depth)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:57
L27	215	("current spreading" "current diffusing") near5 (thickness)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:57
L28	107	27 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/16 11:58
S1	13	"5889806"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:24
S2	4	S1 and transparent	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:24
S3	6	("5777350"   "5889806"   "5959307"   "6040588"   "6100545"   "6153010").PN. OR ("6861663").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:34
S4	913717	LED LCD "light emitting diode" " liquid crystal display"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:50
S5	12785	S4 and GaN "galium nitride"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:51
S6	40	S5 and (transparent near5 "positive electrode")	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:53
S7	1955	S5 and (transparent near5 " electrode")	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:53
S8	641	S7 and (metal near5 semiconductor)	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:54
S9	0	S3 and (curret near3 layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:55

S10	238	S8 and (current near3 layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:56
S11	39	S10 and (electrode near3 (positive negative))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:57
S12	51	S10 and (electrode near10 (positive negative))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/03/18 13:57
S13	103	S12 and GaN "galium nitride"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:58
S14	71	S13 and @ad< "20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:59
S15	26	S12 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 13:59
S16	5272	(257/59,72,257,290).OCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/03/18 14:27
S17	133	S16 and GaN "galium nitride"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 14:27
S18	41	S17 and (transparent near5 " electrode")	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 14:28
S19	6744	(current near3 layer) and LED	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 15:21
\$20	716	S19 and (electrode near3 (positive negative))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/03/18 15:21
S21	26	S20 and ("current blocking layer")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 15:22
S22	16	S21 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/18 15:23
S23	1	"10593288"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 16:16
S24	1	S23 and ("current diffusing layer" near5 conductivity)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/18 16:17
\$25	606089	Huang or sato	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 06:49
S30	1	\$25 and (("current spreader") and (gold silver copper au si cu)) and (("metal layer" and (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:00

S31	1	\$25 and (("current spreader") and (gold silver copper au si cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:01
S32	21	\$25 and (("current spreader" "current diffusion") and (gold silver copper au si cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:01
S33	3	\$32 and (("metal layer" and (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:02
S34	16	["20020014830"   "5438018"   "5438018"   "5818625"   "5990500"   "6081001"   "6614058"   "6693352"   "6802600"   "6815002"   "6815002"   "6815002"   "6815605"   "6815605"   "681665"   "6825502"   "681665"   "681655"   "6	US-PGPUB; USPAT; USOCR	OR	None	2008/03/19 07:05
<b>S3</b> 5	8	S32 and (("metal" and (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:06
S39	267	(("current spreader" "current diffusion" "current diffusing") same (gold silver copper au si cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:10
S40	33	S39 and (("metal layer" and (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:10
S41	14	S40 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/19 07:11
S42	1	"5701035".PN.	USPAT; USOCR	OR	ON	2008/03/19 07:31
S43	1	"5740192".PN.	USPAT; USOCR	OR	ON	2008/03/19 07:32
S44	1	"5764842".PN.	USPAT; USOCR	OR	ON	2008/03/19 07:33
S45	1	"5793057".PN.	USPAT; USOCR	OR	ON	2008/03/19 07:33
S46	182	(("current spreader" "current diffusion" "current diffusing") with (gold silver copper au si cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:52
S47	113	S46 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/03/19 07:53
S48	13442	\$47 (("metal layer" with (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:55

S49	16	S47 and(("metal" with (platinum rutheium osmium rhodium iridium palladium pt ru os rh ir pd)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 07:56
S50	14	("20020072204"   "20040124422"   "6100545"   "6242761"   "6670647"   "6861663"   "6958494").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/03/19 12:21
S51	2	"20070200129"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/09/05 10:07
S52	2	S51 and "current diffusing layer" and "contact metal layer"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/09/05 10:12
S53	38028	GaN "galium nitride"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:26
S54	13827	S53 and (LED LCD "light emitting diode" " liquid crystal display")	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:31
S55	5196	S54 and "semiconductor layer"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:33
S56	939	\$55 and current near5 (spread \$ diffus\$)	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:35
S57	744	S56 and (ohmic metal) near5 layer	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:37
S58	295	\$57 and (ohmic metal) near7 (platinum pt osmium os rhodium rh iridium palladium pd)	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:38
<b>S</b> 60	52	S58 and current near6 (gold silver copper au si cu)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/09/05 10:40
S61	15	S60 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 10:41
S62	4	"6649941"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 11:34
S63	22	"6067309"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 11:35
S64	3	"6037663"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 11:36
S65	40	"5990500"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/05 11:37
S66	1	"11566434"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/09/08 09:16
S67	14	"6331450"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/09/12 11:34
S68	1	"10593288"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/03/06 08:21

S69	2577	("current spreading" "current diffusing")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 11:01
S70	105	S69 and ("current spreading" "current diffusing") near5 pad	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 11:02
S71	59	S70 and ("gallium nitride" "gallium-nitride")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 11:03
S72	9	S71 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/16 11:03
S73	385507	watanabe	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 13:26
S74	1	S73 and ("bonding pad" near5 "current diffusing layer").clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 13:28
S75	1	\$73 and ("bonding pad" near5 ("current diffusing layer" "current spreading layer")). clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 13:29
S76	2	("bonding pad" near5 ("current diffusing layer" "current spreading layer")). dm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/09/16 13:29
S77	45910	(GaN "galium nitride")	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/05 14:39
S78	17699	S77 and (LED LCD "light emitting diode" " liquid crystal display")	US-PGPUB; USPAT; USOOR	OR	ON	2010/03/05 14:40
S79	67	S78 and "contact metal" near5 (thickness depth)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/05 14:41
S80	18	S79 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/05 14:41
S82	1	"12204840"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2010/03/08 10:35
S83	423506	("light emitting" near5 (diode device element))	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	ON	2010/03/15 10:27
S84	13603	S83 and (GaN "galium nitride")	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:27
S85	101	S84 and transparent near5 (positive near5 electrode)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:29
S86	2921	S84 and transparent near5 (electrode)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:29
S87	392	S86 and ("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOOR	OR	ON	2010/03/15 10:32
S88	30	S87 and "contact metal"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:33

S89	8	S88 and "contact metal" near5 (thickness depth)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:33
S90	0	S89 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:33
S91	7	S88 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:36
S92	3034	("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:56
S93	71	\$92 and ("current spreading" "current diffusing" (diffuse near2 current)) near5 (gold au)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:56
S94	3	S93 and (contact) near5 (pt platinum)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 10:57
S95	1639	S92 and (gold au)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:01
S96	740	S95 and pad	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:20
S97	277	\$96 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:20
S98	273	S97 and contact	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:23
S99	253	S98 and metal	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:23
S100	155	(contact near3 metal) near5 clad	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:49
S101	91	S100 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:49
S102	0	S101 and ("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:50
S103	192755	(contact near3 metal)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:50
S104	1015	S103 and ("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:50
S105	100	S104 and (contact) near5 (pt platinum)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:50
S106	100	S105 and (contact) near5 (pt platinum)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:51
S107	45	S106 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 11:51
S108	81	S104 and ("current spreading" "current diffusing" (diffuse near2 current)) with (gold au)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:07
S109	29	S108 and (contact) with (pt platinum)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:08
S110	7	S109 and @ad<"20040512"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:08

S111	8195	("munetaka watanebe" "noritaka Muraki" "Koji kamei" "Yasushi Ohno" "Showa denko")	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:17
S112	259	S111 and (GaN "galium nitride")	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:18
S113	1	S112 and ("current spreading" "current diffusing" (diffuse near2 current)) near5 (gold au)	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:18
S114	20	S112 and ("current spreading" "current diffusing" (diffuse near2 current))	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:19
S115	1	"7109048"	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:37
S116	5	("20030178626"   "20040079947"   "20040106222"   "5789768"   "6943377").FN. OR ("7109048").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/03/15 13:40
S118	9	("20010022367"   "20040124422"   "20050263779"   "20060175682"   "20070200129"   "2007020129"   "5309001"   "6316792"   "683352").FN. OR ("7498611").URFN.	US-PGPUB; USPAT; USOOR	OR	ON	2010/03/15 15:09

## 3/16/2010 12:40:40 PM

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